The invention relates to a circuit arrangement for the integration of EDP systems in the use of telephone installations which are connected to the public ISDN or Euro ISDN telephone The aim is to connect a telephone installations to an EDP installation in such a way that all the functions of the EDP system can be used during the use of the telephone installation. This aim is achieved by using a circuit arrangement consisting of: the telephone sets (2;11;13) which are directly connected to the public ISDN or Euro ISDN telephone system (1) via a line (a) and an intelligent telephone installation (3); and an integration component (5) which is arranged between the intelligent telephone installation (3) and the personal computers (4; 12; 14), on the one hand receives signals via the SDLC or ISDN connector (8) by means of line (b) from the public ISDN or Euro ISDN telephone system (1) through the intelligent telephone installation (3) and send signals back to the public ISDN or Euro ISDN telephone system (1), and on the other hand transmits a set of data having suitable information via line (c), an LAN (9) which is connected via line (d) to the LAN server (10) and line (c) to the personal computers (4; 12; 14) and receives the set of data back from the personal computers (4; 12; 14). The conversion of the signals into the set of data and vice versa is performed by the integration component (5) via a computing system (6), a software layer (7) and an SDLC or ISDN connector (8) with internal software.